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A METHOD OF VEGETATION ANALYSIS FROM THE MOGOȘOAIA HISTORICAL PARK FOR INTEGRATION IN THE SUSTAINABLE MANAGEMENT PLAN

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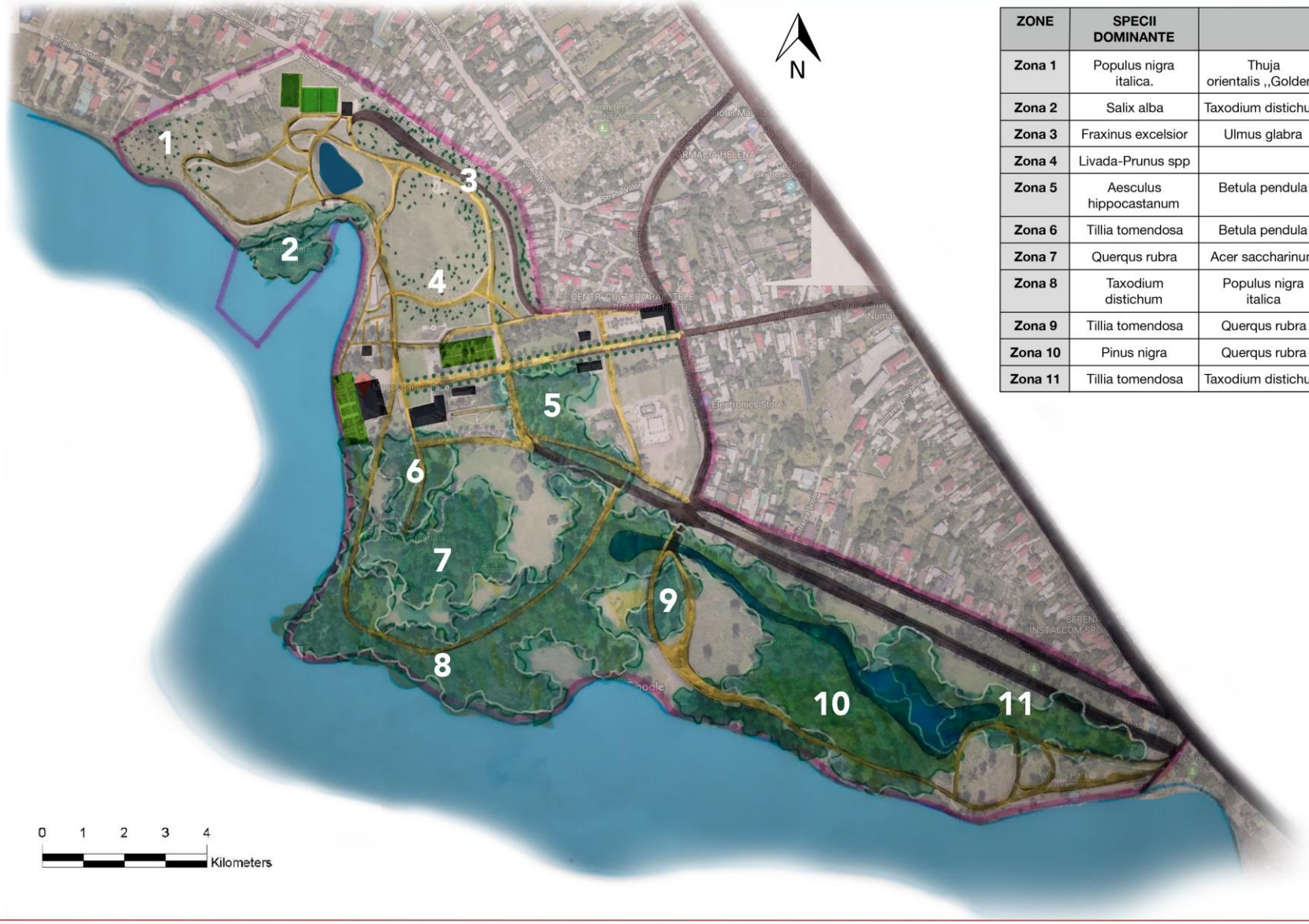
Introduction

- In the historic park of Mogosoaia there are two distinct areas, the new one in the north and the historic one in the South. The north zone is the area of the former orchards with a new intervention designed by Franco-Romanian Landscape Architect Nicolas Triboi in 2002. Besides the specific orchard species, Prunus sp., Malus sp., there are also various Thuja varieties that have been planted in a redevelopment project, but do not fit with the historical characteristics of the park. The southern zone is built in the style of English parks. The interventions that gave the English style were made by Marta Bibescu.
- The study of vegetation analysis aims to identify the elements that have to be preserved in the park, as well as the factors that alter the atmosphere of the English park. By identifying an adaptable method of vegetation analysis, we can propose personalized management solutions to maintain the environment of this historic ensemble.

Materials and Methods

- On-site visits;
- Documents provided by the park's archive;
- Books;
- Scientific articles and newspaper articles;
- Historical pictures and pictures we took on the site;
- Examples of vegetation management from other countries.

Results and discussions



ZONE	SPECII DOMINANTE		
Zona 1	Populus nigra italica.	Thuja orientalis ,,Golden"	
Zona 2	Salix alba	Taxodium distichum	
Zona 3	Fraxinus excelsior	Ulmus glabra	
Zona 4	Livada-Prunus spp		
Zona 5	Aesculus hippocastanum	Betula pendula	
Zona 6	Tillia tomendosa	Betula pendula	Acer sacchaarinum
Zona 7	Querqus rubra	Acer saccharinum	Fraxinus excelsior
Zona 8	Taxodium distichum	Populus nigra italica	Fraxinus spp
Zona 9	Tillia tomendosa	Querqus rubra	
Zona 10	Pinus nigra	Querqus rubra	Taxodium distichum
Zona 11	Tillia tomendosa	Taxodium distichum	Pinus sylvestris

Results and discussions

ZONA 1

The group of young pines planted near the end of the view blocks the view and hinders the access to the new hill. This way, it intervenes in the landscape as a visual and physical barrier.

The tennis court is surrounded by an alignment of Thuja orientalis "Gold", but also by lighting pillars. The tennis court and lighting system is not part of the romantic spirit of the park.

ZONE	SPECII
Zona 1	Populus nigra italica.
	Thuja orientalis ,,Golden"
	Betula pendula
	Aesculus hippocastanum
	Ulmus glabra
	Celtis orientalis
	Platanus acerifolia
	Acer platanoides
	Glaeditsia triacanthos
	Pinus nigra
	Apies alba argentea

Results and discussions

ZONA 1

Zone with young arboreal vegetation

In this picture we can see a playground for children, made in a new style, without taking into account the history of the site or the style in which it is made. The pine group could be positioned to mask the playground.

ZONE	SPECII
Zona 1	Populus nigra italica.
	Thuja orientalis ,,Golden"
	Betula pendula
	Aesculus hippocastanum
	Ulmus glabra
	Celtis orientalis
	Platanus acerifolia
	Acer platanoides
	Glaeditsia triacanthos
	Pinus nigra
	Apies alba argentea

Results and discussions

ZONA 2

The new hill is shielded by trees, blocking visual access to the lawn or water. It is also noted that the lawn has a higher elevation than the alley.

Looking to the palace and the small island, reed can be seen on the edge and, further away, specimens of willow and cypress.

ZONE	SPECII
Zona 2	Salix alba
	Taxodium distichum
	Eleagnus angustifolia
	Robinia pseudacacia
	Rhus typhina
	Pinus nigra

Results and discussions

ZONA 3

Along the fence there is a Berberis alignment, but it is not tall enough to mask the high-rise houses on the protection zone

The area with ash trees and young elms. There are pine specimens that are too close to the other trees - the pines will be shaded by the crown of the surrounding trees

ZONE	SPECII
Zona 3	Fraxinus excelsior
	Ulmus glabra
	Populus nigra italica
	Betula pendula
	Sophora japonica
	Rhus typhina
	Robinia pseudacacia

Results and discussions

ZONA 3

The alley that descends from the palace to the tennis courts has some alveoli that are not justified in the landscape and which negatively marks the aesthetic impact.

There are lighting pillars used in street alignments. They are not part of the spirit of a romantic nature park. Also, the children's play area is not in the style of the park or vegetation.

ZONE	SPECII
Zona 3	Fraxinus excelsior
	Ulmus glabra
	Populus nigra italica
	Betula pendula
	Sophora japonica
	Rhus typhina
	Robinia pseudacacia

Results and discussions

ZONA 4

There are shrub alignments that fragment the lawn and act as a barrier.

Although the landscape is more fluid and allows perspective openings, there is no real water contact in the sense that there are no sitting places near the water

ZONE	SPECII
Zona 4	Livada- Prunus spp

Results and discussions

ZONA 4

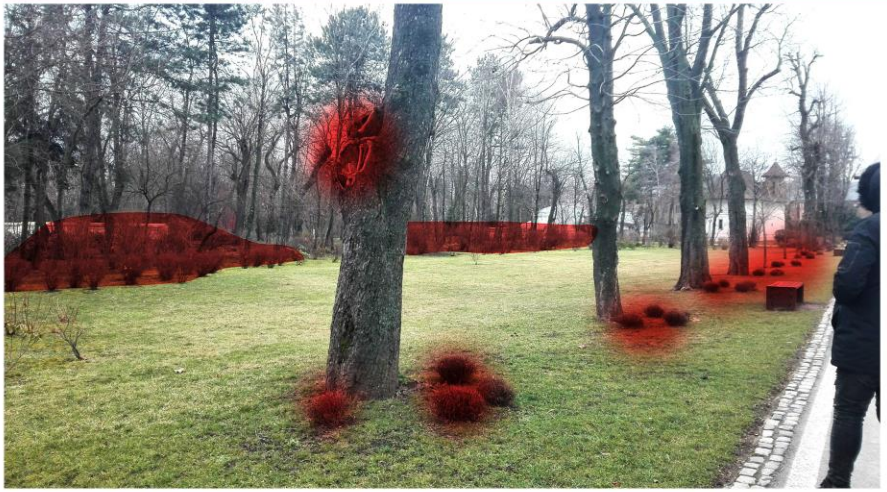
There can be seen the area of young orchards, where are also found ornamental species of trees and shrubs

ZONE	SPECII
Zona 4	Livada- Prunus spp

Results and discussions

ZONA 5

Entrance to the new park area is marked by a massive of Cotoneaster which is too imposing and has a negative effect.



In the area of the main entrance there is an alignment of chestnuts marking the entrance and the way to the palace. At the bottom of the trees there are ephemeral interventions with bushes, and in the distance to the English park area, shrub alignments separate and shine the areas.

ZONE	SPECII
Zona 5	Aesculus hippocastanum
	Betula pendula
	Pinus silvestre
	Tillia tomentosa
	Acer campestre
	Querqus robur

Results and discussions

ZONA 5

ZONE	SPECII
Zona 5	Aesculus hippocastanum
	Betula pendula
	Pinus silvestre
	Tillia tomentosa
	Acer campestre
	Querqus robur

Some trees have undergone aggressive interventions that have led to their degradation

The rose area is marked by the Buxus hedges that border the rosary in a geometric style.

Results and discussions

ZONA 6

The area of family tombs is located in the English park and is marked by deciduous and evergreen trees

Venetian gardens are located up on the shore of the water, emphasizing the scenery and the relief. These are composed of Buxus and roses, accentuated by Thuja columnaris.

ZONE	SPECII
Zona 6	Tillia tomendosa
	Betula pendula
	Acer saccharinum
	Querqus rubra
	Sophora japonica
	Pinus nigra
	Pinus sylvestris
	Platanus acerifolia

Results and discussions

ZONA 6

ZONE	SPECII
Zona 6	Tillia tomendosa
	Betula pendula
	Acer saccharinum
	Querqus rubra
	Sophora japonica
	Pinus nigra
	Pinus sylvestris
	Platanus acerifolia

In the area of the English park there are remarcable specimens of pine and oak trees.

On the edge of the alleys, at the limit of the English park area, can be found groups of deciduous and evergreen shrubs that mark the limits.

Results and discussions

ZONA 7

ZONE	SPECII
Zona 7	Querqus rubra
	Acer saccharinum
	Fraxinus excelsior
	Pinus sylvestris
	Robinia pseudoacacia
	Catalpa bignonoides

In this area we find the old greenhouses that are being restored.

The boundary of the English park is marked by a bushy border that separates the benches from the park itself. Although the park's open space invites the viewer to walk, the juniper separating the alleys and banks from the lawn are acting as a barriers.

There are important specimens of trees that have suffered various traumas in the past. In this case, keeping the tree marks the place's memory, and its lack would have a negative effect on the landscape.

Results and discussions

ZONA 8

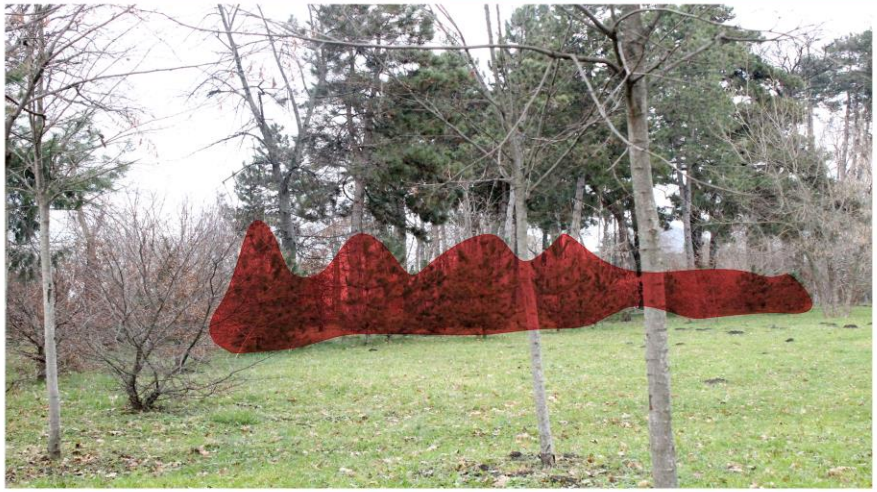
It can be noticed that the area has a lizier aspect, with many raised saplings. Appearance is messy, loaded, difficult to penetrate.

It is the area least affected by interventions, being the closest to the English park's style.

ZONE	SPECII
Zona 8	Taxodium distichum
	Salix spp
	Populus nigra italia
	Fraxinus spp
	Querqus rubra
	Acer saccarinum
	Pinus sylvestris
	Robinia pseudoacacia
	Eleagnus angustifolia

Results and discussions

ZONA 9



There are pine groups that act as barriers between spaces

ZONE	SPECII
Zona 9	Tillia tomentosa
	Querqus rubra
	Acer platanoides
	Acer saccharinum
	Populus nigra
	Platanus acerifolia
	Taxodium distichum
	Salix spp

Results and discussions

ZONA 10

ZONE	SPECII
Zona 10	Salix spp
	Pinus nigra
	Querqus rubra
	Taxodium distichum
	Eleagnus angustifolia
	Platanus acerifolia
	Betula pendula
	Tillia tomentosa
	Acer saccharinum
	Acer platanoides
	Cotinus coggigria

There is a high density of vegetation, being in the vicinity of the wet area.

The water bank is marked by reedbeds and lawn areas.

There is hydrophilic spontaneous vegetation along with the reed. The water bank is hardly accessible.

Results and discussions

ZONA 11

There are remarcable specimens of Taxodium distichum on the waterfront

The recreational area has undergone aggressive interventions, which have departed from the romantic natural spirit of the park. There are rosettes of roses dotted with young specimens of Acer saccharinum. In winter, as the picture shows, the landscape is dominated by synthetic ornaments (plastic beads, lights, pitches, etc.)

ZONE	SPECII
Zona 11	Tillia tomentosa
	Pinus sylvestris
	Taxodium distichum
	Salix spp
	Acer spp
	Querqus rubra
	Eleagnus angustifolia
	Betula pendula
	Magnolia

Results and discussions

ZONA 11

The shores of the lake are fenced and the green spaces are fragmented by huts, benches, lighting pillars, rosettes of roses. This area of the historical park seems to be different from the context.

It can be noticed that the historical alley of Târgovişte also underwent intense changes - the Ulm historians limiting the alley disappeared and the alley was enlarged and concreted, the lighting pillars remaining in the same position. The landscape becomes incoherent and the historical value is null.

ZONE	SPECII
Zona 11	Tillia tomentosa
	Pinus sylvestris
	Taxodium distichum
	Salix spp
	Acer spp
	Querqus rubra
	Eleagnus angustifolia
	Betula pendula
	Magnolia

Conclusions and recommendations

- Following the implementation of this method of analysis, it can be observed that the north area does not respect the romantic ambiance of the English park, but rather gives it a modern ambiance because of the use of ornamental species that are not found in the rest of the park. This is caused by the new species used on site such as Pinus nigra, Thuja sp., Berberis sp., Picea pungens “Argentea”.
- In the southern area, the Targoviște alley underwent radical transformations, with the introduction of ornamental species such as Rosa sp., Yucca sp., giving the impression of an urban park with no connection to the historical ensemble in the immediate vicinity.
- This vegetation analysis is designed to highlight the discrepancies between the historical area of the park and the newly recreated area and to identify the zones that are the most seriously affected by interventions not adapted to a historical site. This study aims to highlight the need to integrate these analyzes into a personalized management program for historical parks.

References

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